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EXAMINER
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GELIN, JEAN ALLAND

ART UNIT	PAPER NUMBER
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2681

DATE MAILED: 01/21/2004

66-52

Please find below and/or attached an Office communication concerning this application or proceeding.

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## Office Action Summary

Application No.

09/713,121

Applicant(s)

NATIONS ET AL.

Examiner

Jean A Gelin

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 15 November 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-8, 10-17, 19-25 and 27-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 32 and 33 is/are allowed.
- 6) ☒ Claim(s) 1-8 and 10-17 is/are rejected.
- 7) ☒ Claim(s) 23 and 24 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_. 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. This is in response to the Applicant's arguments filed on November 03, 2003 in which claims 1-8, 10-17, 19-25, and 27-33 are currently pending.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-8, 10-17, 19-22, 25, and 27, 29-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Adiwoso et al. (US 5,963,862) in view of Kikinis (US 6,205,485).

Regarding claims 1, and 25, Adiwoso teaches a data transmission system (i.e., illustrated in figs. 1 and 12 comprising: a two-way communication link (25) comprising at least one satellite (i.e., satellites 12, 13) at least one user terminal (20) having two-way communication with the two-way communication link (25); and comprising inherently a memory for storing data broadcast by way of the satellite of the two-way communication link (i.e. huge amount of information (gigabytes) flowing in the forward link from satellite to the terminal, col. 5, lines 59-67), a software which retrieves information requested by way of the user terminal and information related to the requested information (i.e., terminal 20 typically a software to perform the function of multi-media terminal in col. 5, line 33 to col. 6, line 36); and at least one gateway (30 or 300) having access to data

(i.e., access information on internet and having two-way communication with the two way communication link (figs. 1 and 2, links 45, 46).

Adiwoso does not specifically teach the terminal having a cache for caching broadcasted data from the satellite.

However, the preceding limitation is known in the art of communications. Kikinis teaches a communication terminal (e.g., a set box) receives a video stream from satellite 113 via a special driver and put into a cache, which is considered as part of memory system (col. 6, lines 60-67). Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to implement the cache taught by Kikinis within the system of Adiwoso in order to store the programming pages in the cache of memory system. Thus, those pages found in the cache do not have to be searched from the Internet by modem, but can be taken directly out from the cache (col. 7, lines 5-25).

Regarding claim 2, Adiwoso in view of Kikinis teaches all the limitations. Adiwoso further teaches the two-way communication link comprises a low bandwidth two-way communication link (col. 6, lines 35-40).

Regarding claims 3, 5, and 7, Adiwoso in view of Kikinis teaches all the limitations. Adiwoso teach the two-way communication link comprises a Ku-band and Ka-band (col. 6, lines 63-67).

Regarding claim 4, Adiwoso in view of Kikinis teaches all the limitations. Adiwoso further teaches the two-way communication link comprises a high bandwidth data broadcast link (col. 6, lines 41-45).

Regarding claims 6, 8, Adiwoso in view of Kikinis teaches all the limitations. Adiwoso teaches the Ku-band and Ka-band provide a plurality of spot beams that covered selected coverage regions (col. 7, line 62 to col. 8, line 9).

Regarding claims 10 and 27, Adiwoso in view of Kikinis teaches all the limitations. Adiwoso further teaches the gateway (30) typically comprises a storage device, but not a cache.

However, the use of cache as part of memory system is disclosed in the system of Kikinis (col. 6, lines 65-67). Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to implement the cache taught by Adiwoso as part of the memory system in order to store video data received from the satellite.

Regarding claims 11, and 29, Adiwoso in view of Kikinis teaches all the limitations as recited in claim 1 and 25 above. Adiwoso further teaches generating requests for data at the at least one user terminal (col. 9, lines 60-67); transmitting the requests for data from the at least one user terminal by way of the two-way communication link to the at least one gateway (col. 9, lines 60-63, col. 10, line 16-43); obtaining the requested data at the at least one gateway (col. 10, lines 27-57); and transmitting the requested data from the at least one gateway to the at least one user terminal by way of the two-way communication link (col. 10, lines 27-57).

Regarding claims 12-16, Adiwoso in view of Kikinis teaches all the limitations. Adiwoso further teaches transmitting the requests for data comprises transmitting the requests for data by way of low bandwidth communication link, low bandwidth satellite

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communication link, low bandwidth terrestrial communication link, or low bandwidth wireless communication link (col. 4, line 31 to col. 5, line 53, col. 6, lines 35-40).

Regarding claim 17, Adiwoso in view of Kikinis teaches all the limitations. Adiwoso further teaches transmitting the requests for data comprises transmitting the requests for data by way of high bandwidth data broadcast link (col. 5, lines 1-7; col. 6, line 41-47).

Regarding claims 19, 20, Adiwoso in view of Kikinis teaches all the limitations. Adiwoso further teaches obtaining the requested data at the at least one gateway using a user's request history to obtain the requested information which is equivalent to the step of obtaining the requested data at the at least one gateway comprises using a user's user profile to obtain the requested information, (reads on the gateway is in communication with a billing function to generate data/bill related to specific subscriber unit for authorization purpose, col. 4, lines 50-60, col. 5, lines 1-50).

Regarding claim 21, Adiwoso in view of Kikinis teaches all the limitations. Adiwoso further teaches obtaining the requested data along with data related to the requested data at the at least one gateway (col. 4, lines 50-60, col. 5, lines 1-50), and transmitting the requested and related data from the at least one gateway to the at least one user terminal by way of the two-way communication link (col. 5, line 33 to col. 6, line 3, col. 10, lines 4-16).

Regarding claim 22, Adiwoso in view of Kikinis teaches all the limitations. Adiwoso further teaches storing the requested and related information at the gateway (col. 13, lines 38-54).

Regarding claims 30-31, Adiwoso in view of Kikinis teaches all the limitations. Kikinis further teaches the cache has a size on the order of 30 gigabytes or multi-gigabyte hard disk (i.e., inherently present in the cache memory to store huge amount of information forwarded from the satellite to the terminal col. 6, line 41 to col. 7, line 16).

4. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Adiwoso et al. (US 5,963,862) in view of Kikinis (US 6,205,485) further in view of Stephens et al. (US 6,519,262).

Regarding claim 28, Adiwoso in view of Kikinis teaches all the limitations above except the terrestrial communication link for transmitting the requested data to the at least one user terminal in the event that the satellite broadcast link becomes inoperative.

However, the preceding limitation is known in the art of communications. Stephens teaches for satellite broadcast systems, it is generally desirable to have complimentary terrestrial transmitters should the satellite transmitters (col. 2, lines 3-5). Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to implement terrestrial transmitters taught by Stephens within the system of Adiwoso in view of Kikinis in order to avoid dropped calls and make the communications system more reliable.

***Allowable Subject Matter***

5. Claims 32 and 33 are allowed.

6. Claims 23-24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. The following is an examiner's statement of reasons for allowance: claims 23, 24, 32, and 33 are allowed for the same reason recited in the previous Office Action (Paper # 12).

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Puente et al. (US 6,038,594) teaches internet communication system and method with aymetric terrestrial and satellite links.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean A Gelin whose telephone number is (703) 305-4847. The examiner can normally be reached on 9:00 AM to 6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh Tran can be reached on (703) 305-4040. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9314.



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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4847.

JGelin  
January 7, 2004

**JEAN GELIN**  
**PATENT EXAMINER**

*Jean Allard Gelin*